



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,807	11/16/2001	Gil Gavriel Dudkiewicz	051448.0201	1953

7590 12/27/2005

David A. Blumenthal  
FOLEY & LARDNER  
Suite 3500  
2029 Century Park East  
Los Angeles, CA 90067-3021

EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/991,807	<b>Applicant(s)</b> DUDKIEWICZ ET AL.	
	<b>Examiner</b> Jason P. Salce	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-16 and 20-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-16 and 20-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/6/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statement (IDS) submitted on 7/6/2005 was filed after the mailing date of the non-final rejection on 3/25/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### *Response to Arguments*

Applicant's arguments, see Pages 14-19, filed 9/26/2005, with respect to the rejection(s) of claim(s) 1-20 and 35-44 under U.S.C. 102(e) and U.S.C. 112 1<sup>st</sup> Paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hullinger in view of Aristides. The examiner notes that Aristides teaches transmitting the metadata (program guide data) prior to transmission of the television broadcast.

Applicant's arguments filed 9/26/2005 with respect to claims 21-34 have been fully considered but they are not persuasive.

Applicant argues that Hullinger does not teach generating for each candidate keyword a set of goodness of fit scores corresponding to **subject matter categories**, where each goodness of fit score represents a **degree to which the category is descriptive of the candidate keyword**. The examiner disagrees and note that Table I clearly describes "Topic 1" and "Topic 2", which is clearly a subject matter category.

Art Unit: 2614

Further, each score is representative of how many times the candidate keyword is found in the closed caption data of the television program, therefore clearly teaching that each score represents a degree (how many times) that the category ("Topic 1") is descriptive of the candidate keyword. If the candidate keyword (any word in phase ID 28) states football 81 times, then the score 81 represents a degree to which the category ("Topic 1") is descriptive of the candidate keyword. The examiner notes that the limitation "descriptive" is broad and in no way limits how a category is descriptive of the candidate keyword, therefore, clearly the number of times the candidate keyword appears in the television program is one of many ways of being descriptive.

Applicant also argues that keywords are not selected among candidate keywords based on their sets of numerical category scores. See again Column 8, Line 50 through Column 9, Lines 1-43 for rescoreing and combining or splitting up candidate keywords, thereby selecting keywords from candidate keywords.

Applicant also argues that Hullinger does not identify verbs or nouns. Again see the previous rejection of claim 22 for Hullinger capturing the word "visit" (verb) and "Statue" (noun).

Applicant also argues that Hullinger does not teach the limitations of claim 23. The examiner believes that Hullinger clearly teaches correlation of the data described in claim 23 (see the rejection of claim 23 below).

Applicant also argues that Hullinger does not teach three-levels of a hierarchy, again note Figure 6 of Hullinger.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 21-34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hullinger et al. (U.S. Patent No. 6,295,092).

Referring to claim 21, Hullinger discloses obtaining production data corresponding to the programming event from a production system used in the production of the programming event, the production data including descriptive information for the programming even (see rejection of claim 1).

Hullinger also discloses determining candidate keywords from the production data (see Column 4, Lines 44-49 for the parser process determining the keywords that will be scored (also note Column 5, Lines 63-67 and Column 6, Lines 1-12 and the example of a one-word vocabulary table created by the parser process)).

Hullinger also discloses providing the candidate keywords as respective inputs to a classification tool and generating for each of said candidate keywords a set of numerical goodness of fit scores each corresponding to a predefined category (see Table I and Column 6, Lines 25-67 for creating a score table), wherein the numerical goodness of fit score corresponding to a category represents a degree to which the

category is descriptive of the candidate keyword (see Column 6, Lines 35-43 for counting the number of occurrences of the candidate keyword in the program being parsed by the parser process 58).

Hullinger also discloses selecting keywords to represent the programming event from among said candidate keywords based on the set of numerical goodness of fit scores for each of said candidate keywords (see Column 8, Lines 50-67 and Column 6, Lines 1-35 for selecting keywords from the candidate keywords (in the table at Column 9, Lines 1-13) using goodness of fit scores corresponding to categories (Local, National or International) of the classification hierarchy (which is based on the score) for the candidate keywords).

Hullinger also discloses storing said keywords in a computer readable medium as a component of said metadata describing the programming event (see Column 9, Lines 36-41 for storing the data after the processing described above).

Referring to claim 22, Hullinger discloses determining verbs and nouns from the production data, and using these words as candidate keywords (see Column 9, Lines 1-13 for a table that contains captured phases, that contain both a noun ("Statue") and a verb ("visit"), which are used for re-scoring a newly combined segment).

Referring to claims 23, Hullinger discloses determining correlations between sets of numerical goodness of fit scores generated by providing said descriptive information for the programming event as input to said classification tool (see again Column 9, Lines 31-48 for re-scoring (correlating) information about segments, captured by the system and providing this data to a user interface (classification tool) for further viewing

and editing). Hullinger also discloses discarding candidate keywords having low correlation (see Column 19, Lines 8-14 for discarding words that have only been encountered in the correlation once or twice).

Referring to claim 24, see again Column 19, Lines 8-14 for discarding words that have a low probability (low fit score) of being encountered, therefore, words that have a high probability (high fit score) of being encountered in the parsing process will be selected for further processing.

Referring to claim 25, see rejection of claim 9 (below).

Referring to claim 26, see rejection of claim 7 (below).

Referring to claims 27-32, see rejection of claims 21-26, respectively.

Referring to claims 33-34, see rejection of claim 3 (below).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 and 35-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hullinger et al. (U.S. Patent No. 6,295,092) in view of Aristides et al. (U.S. Patent No. 5,657,072).

Referring to claim 1, Hullinger discloses obtaining production data corresponding to the television program from a production system used in the production of the

television program (see Column 3, Lines 47-50 for receiving data from a ratings server as well as broadcast data from the capture devices in Figure 1), prior to the broadcast of the television program (see arguments above). Note that Hullinger clearly teaches a programmable device in Figure 1.

Hullinger also discloses assigning respective numerical goodness of fit scores to respective predefined categories based on analysis of the production data to describe the subject matter of the television program, wherein the numerical goodness of fit scores assigned to a category represents a degree to which the category is descriptive of the subject matter of the television program (see Table I and Column 6, Lines 23-67 for assigning scores to predefined categories (Topic 1 through Topic N)).

Hullinger also discloses assigning keywords to the television program event based on analysis of the production data (see Column 5, Lines 63-67 and Column 6, Lines 1-11 providing a vocabulary table that contains keywords that are assigned (from the process described at Column 9, Lines 49-57 for creating the vocabulary table based on the analysis of the production data).

Hullinger also discloses storing numerical goodness of fit scores and keywords for the television program in a computer readable medium in association with time data and descriptive data for the television program (see Column 3, Lines 58-59 for storing all production information received to server 20 in Figure 1) as the metadata describing the television program (see Column 3, Lines 60-61 for transmitting this information to a user interface for display to a user to describe the programming events).

Hullinger teaches a post-production system that receives metadata from the



capture machines 14, 16 and 18 in Figure 1 as well as from the ratings data 22 in Figure 1, and that this data is used to "optimize future newscasts to increase ratings" (see Column 2, Lines 58-60). Therefore, the whole purpose of Hullinger is to receive the metadata and optimize the broadcast of television program (at the post-production system) before being sent to viewer's television program receiver (also note 112 rejection above).

Hullinger is silent as to transmitting metadata for the television program to television program receivers before broadcast of the television program to the television program receivers.

Aristides discloses transmitting metadata for television programs to television program receivers before broadcast of the television program to the television program receivers (see Column 3, Lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify television program analyzing server 20, as taught by Hullinger, to transmit metadata prior to the transmission of the television programs, as taught by Aristides, for the purpose of reducing the number of request made to the server during a peak time, thereby preventing the bottleneck associated with handling many request during peak activity times (see Column 3, Lines 6-9 and 21-22 of Aristides).

Referring to claim 2, Hullinger discloses determining respective numerical goodness of fit scores corresponding to said categories for each of candidate keywords (note that keywords are also candidate keywords, the term "candidate" is broad and

Hullinger discloses classifying these keywords according to their score, therefore all keywords before they are scored and processed according to there score (see Column 8, Lines 50-67 for re-scoring and classifying keywords for selection).

Referring to claim 3, Hullinger discloses that pre-defined categories are arranged in a hierarchy (see Figure 6) comprising at least a set of top-level categories ("General" level in Figure 6), respective sets of first level sub-categories each corresponding to and encompassed by a top level category (see "KDKA", "WTAE" and "WPXI" levels under the "General" level in Figure 6), and respective sets of second level sub-categories each corresponding to and encompassed by a first level sub-category (see time slot level under the station level and "General" level in Figure 6).

Referring to claim 4, Hullinger discloses determining a subset of fit scores and storing the fit scores comprises storing the subset of fit scores (see rejection of claim 3 for storing time subsets of scores on the third level of the hierarchy disclosed in Figure 6).

Referring to claim 5, Hullinger discloses that production data comprises rundown (data describing what is going to be aired at a specified time) data produced by the production system (see Column 6 again for the third level storing data (scores) on a specific time a station is airing a broadcast).

Referring to claim 6, Hullinger discloses that production data comprises script data (see Column 4, Lines 49-52 for storing closed caption (script) data).

Referring to claim 10, Hullinger discloses selecting a predetermined number of assigned keywords for storage (see Column 7, Lines 29-32 for storing a subset of all

text captured by the system).

Referring to claims 11-16 and 20, see rejection of claim 1-6 and 10, respectively.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce  
Patent Examiner  
Art Unit 2614

December 22, 2005

A handwritten signature in black ink, appearing to read "Jason Salce", is written over the typed name and title.